

Summary of Data and Code Files for "Activity shocks and corporate liquidity: the role of trade credit"

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Abstract

This document lists the data sets and scripts used in the analysis and describes how to access the data, in compliance with Review of Corporate Finance policy for data and code disclosure. The data we employed are proprietary and subject to a nondisclosure agreement. However, the Banque de France (producer of the data) allows academic researchers to access some of its data through the 'Centre d'Accès Sécurisée aux Données' (CASD) by filing a specific access request (see https://cdap.casd.eu/Procedure_BdF_ModuleCSS_CDAP.pdf). See <https://www.comite-du-secret.fr/procedure-fr/procedure-via-cdap> for the procedure to access the data through the CASD.

The FIBEN database that gathers financial statements of a wide set of non financial firms operating in France and the Central Credit register database are accessible through the CASD. The access to the the Payment Defaults database (CIPE) and to Non Performing Loans database is restricted ; the data is only available internally or by addressing a special request to the Data Access Committee of the Banque de France (CPAD). Related questions can be addressed to data.access@banque-france.fr.

We report below the list of data sets that were used in our analysis together with, when available, their CASD label and the list of variables that these data sets include (Table I). All the listed variables are necessary to replicate our analysis.

The softwares used for the analysis are Stata and SAS. The Stata packages used are specified in the Main.do file. It is assumed that the user's working directory contains a 'datapath' directory which contains the original key datasets, a 'do' directory containing the scripts used to replicate the analysis and a 'mypath2' directory containing the intermediate tables.

The key data sets used in the analysis are the following:

- `datapath/fiben_2016_2020.dta` include financial statement information from 2016 to 2020. The unit of observation is firm-year. Firms are identified by identified by their siren number (firm id). CASD label: *Bilans sociaux - Éléments de Bilan (Hors Centrale de Bilan)*. DOI : <https://doi.org/10.34724/CASD.569.4241.V1>
This dataset has been enriched with the firm internal credit rating information. The access to Banque de France internal credit rating information is restricted and must be subject to a special request to the contact person.
- `datapath/SCR.dta` contains credit registry information. The unit of observation is firm-bank-branch-month. Firms are identified by their siren number (firm id). CASD label: *Crédit distribué aux entreprises par les banques (SCR)*. DOI : <https://doi.org/10.34724/CASD.572.4813.V1>
- `datapath/montant_incident_2019_2020.dta` and `datapath/cipe_2017_2022` includes information at the firm-month level on monthly payment defaults on trade bills, their amount in euros as well the nature/reason of the missed payment in 2019-2020 for the former, and from 2017 to 2020 for the latter. Firms are identified by their siren number (firm id). This dataset does not have a determined equivalent in the CASD as its access is restricted and must be subject to a special request to the contact person.
- `datapath/Credit_et_douteux.dta` contains information about non performing loans. The unit of observation is firm-month. Firms are identified by their siren number (firm id). This dataset does not have a determined equivalent in the CASD as its access is restricted and must be subject to a special request to the contact person.
- `datapath/defaillances_2017_22` contains information about bankruptcy procedures. The data set gathers information collected by the Banque de France on court rulings from the registries of the commercial courts, the courts of first instance with jurisdiction in commercial matters and the courts of the French overseas departments and territories (this information is technically publicly available. See : <https://www.bodacc.fr/pages/home/>). The data set used does not have a determined equivalent in the CASD and must be subject to a special request to the contact person.

The following scripts replicate the analysis. Specifically:

- `do/Altman_score_SAS_code` is a SAS program, to be run independently before the start of the analysis and which estimates coefficients needed to calculate the Z-scores of the firms.
- `do/Make_base.do` combines raw datasets and builds 'mypath2/fiben_2018_SCR_IP.dta' used for the main analysis.
- `do/Prepare_data_for_regressions.do` produces a tidy version of the datasets that are later used for baseline regressions in the manuscript (Tables 7–11 and 13–14).
- `do/Prepare_data_for_bankruptcy_regressions.do` produces a tidy version of the dataset used for the regressions on pre-Covid bankruptcy likelihood (Table 12).
- `do/Replication_code_final.do` replicates the analysis from the main text : as shown in the Tables 7 to 15, Figures 7 and 8, and Descriptive Statistics Tables 3 to 5.

Finally, the code `do/main.do` launches the previous Stata scripts sequentially to reproduce the entire analysis contained in the paper.

To ease the reading of these scripts, Table 1 associates each of the variables in Tables and Figures of the paper with its name as in the code.

Table 1: Variable names as in the code

This table associates each of the variables in Tables and Figures of the paper with its name as in the code.

Variable	As in the code	Related table(s)
<i>Dependent variable</i>		
Payment Default Dummy	firm_with_ip	Table 6,7,8,9,10,14
Bankruptcy	defaillance	Table 11
Amount under Default	ln_aud	Table 13
AuD/Sales	aud_ca	Table 13
Number of defaults	nb	Table 13
Probability of multiple defaults	more_than.1	Table 13
<i>Covariates</i>		
Trade credit	cie	Table 6,8,9,10,11,13,14
Trade Credit \times Post	cie_post	Table 6,9,10,13,14
Trade Credit \times March-April	cie_march	Table 6
Trade Credit \times May-June	cie_may	Table 6
High Trade credit \times MarchApril	treated_march	Table 7,8
High Trade credit \times MayJune	treated_may	Table 7,8
Cash holdings	cash.ta	Table 6,7,8,9,10,11,12,13,14
Leverage	leverage	Table 6,7,8,9,10,11,12,13,14
Size	size	Table 6,7,8,9,10,11,12,13,14
Liquidity needs	share_st_lag3	Table 6,7,8,9,10,12,13,14
Non-performing loans (NPL)	ratio_douteux	Table 6,7,8,9,10,12,13,14
Z-score	altman_w	Table 6,7,8,9,10,12,13,14
<i>Covariates \times Post</i>		
Leverage \times Post	leverage_post	Tables 6,7,8,9,10,12,13,14
Cash \times Post	cash.ta_post	Tables 6,7,8,9,10,12,13,14
Size \times Post	size_post	Tables 6,7,8,9,10,12,13,14
Liquidity needs \times Post	st_post	Tables 6,7,8,9,10,12,13,14
NPL \times Post	douteux_post	Tables 6,7,8,9,10,12,13,14
Z-score \times Post	altman_post	Tables 6,7,8,9,10,12,13,14
<i>Other controls</i>		
D \times TC \times Post	cie_D_post	Table 9,10
D \times TC	cie_D	Table 9,10
D \times Post	post_D	Table 9,10
D	D	Table 10
At least one dispute default 3m	at_least_one_dispute_3m	Table 11
At least one liquidity default 3m	at_least_one_illiq_3m	Table 11
Risky rating	low_rated	Table 11
Receivables	ccca	Table 12
Payables	dfac	Table 12
Receivables \times Post	ccca_post	Table 12
Payables \times Post	dfac_post	Table 12